cylinder having a second diameter, the plurality of elongated beams having a beam width in a circumferential direction and wherein adjacent elongated beams form substantially V-shapes when the cylinder is at the second diameter; and

a plurality of hinges connecting the elongated beams having a hinge width, wherein the hinge width is smaller than the beam width, wherein the plurality of hinges [are] each have a tapered portion such that an end of each hinge closer to an apex of the substantially V-shapes formed by the adjacent elongated beams has a width which is greater than a width of the hinge at an opposite end, and the tapered portion has a length longer than a non-tapered portion of the hinge.

49. (Previously Presented) The device of Claim 48, wherein the plurality of hinges taper substantially linearly.

50. (Currently Amended) The device of Claim 48, wherein [each of the plurality of hinges includes a first] the non-tapered portion [extending] extends along about 1/3 of the length of the hinge and [a second] the tapered portion [extending] extends along about 2/3 of the length of the hinge[, wherein the second portion is tapered].

51. (Previously Presented) The device of Claim 48, wherein during expansion the hinges experience deformation below their elastic limit.

52. (Previously Presented) The device of Claim 48, wherein deformation during expansion is confined to the hinge.

53. (Previously Presented) The device of Claim 48, wherein during expansion a structure adjacent the hinges experiences at least two degrees of freedom of motion.

54. Canceled

55. (Currently Amended) The device of Claim 48, [An expandable medical device comprising:

a plurality of elongated beams;

a plurality of hinges connecting the plurality of beams together in a substantially cylindrical medical device which is expandable from a cylinder having a first diameter to a cylinder having a second diameter,] wherein the plurality of hinges are tapered with the hinge width, hinge length, and taper adjusted to achieve a desired value of the maximum strain along the hinge.

56. – 63. Canceled

64. (Previously Presented) The device of Claim 48, wherein the taper is substantially constant along a length of about 2/3 of a length of the hinge.

65. (Previously Presented) The device of Claim 48, wherein the taper extends along a length of about 2/3 of a length of the hinge.

66. (Currently Amended) The [expandable medical] device [according to] of Claim 48, comprising a pawl disposed adjacent to the hinge and a plurality of teeth adapted to receive the pawl in a locking configuration.

67. (Currently Amended) The [expandable medical] device [according to] of Claim 66, wherein during expansion, the pawl experiences at least two degrees of freedom of motion.

68. (Currently Amended) The [expandable medical] device [according to] of Claim 48, wherein the device is laser-cut.

69. (Currently Amended) The [expandable medical] device [according to] of Claim 48, wherein the elongated beams further include a plurality of apertures disposed therein and a beneficial agent disposed within the apertures.

70. (Currently Amended) The [expandable medical] device [according to] of Claim 48, wherein a recoil of the medical device after expansion to the second diameter is less than about eight percent.

71. (Currently Amended) The [expandable medical] device [according to] of Claim 48, wherein a recoil of the medical device after expansion to the second diameter is less than about five percent.

72. (Currently Amended) The [expandable medical] device [according to] of Claim 48, wherein the device is manufactured of a biodegradable material.

73. (Currently Amended) The [expandable medical] device [according to] of Claim 48, wherein the device is manufactured of Nitinol, polymer, or a composite of polymer and Nitinol.

74. - 84. Canceled

85. (New) An expandable stent comprising:

a plurality of elongated beams joined together to form a substantially cylindrical stent which is expandable from a cylinder having a first diameter to a cylinder having a second diameter, wherein adjacent ones of the plurality of elongated beams form substantially V-shapes when the cylinder is at the second diameter; and

a plurality of hinges connecting the elongated beams, the plurality of hinges having a hinge width and the plurality of elongated beams having a beam width, wherein the hinge width is smaller than the beam width, the plurality of hinges each includes a tapered portion such that an end of each hinge closer to an apex of the substantially V-shapes formed by the adjacent elongated beams has a width which is greater than a width of the hinge at an opposite end, and wherein substantially the entire tapered portion of the hinge deforms during expansion of the cylinder from the first diameter to the second diameter.

86. (New) The stent of Claim 85, wherein the tapered portion tapers substantially linearly.

87. (New) The stent of Claim 85, wherein a non-tapered portion of the hinge extends along about 1/3 of the length of the hinge and the tapered portion of the hinge extends along about 2/3 of the length of the hinge.

88. (New) The stent of Claim 85, wherein during expansion the hinges experience deformation below their elastic limit.

89. (New) The stent of Claim 85, wherein deformation during expansion is confined to the hinge.

90. (New) The stent of Claim 85, wherein during expansion a structure adjacent the hinges experiences at least two degrees of freedom of motion.

91. (New) The stent of Claim 85, wherein the plurality of hinges are tapered with the hinge width, hinge length, and taper adjusted to achieve a desired value of the maximum strain along the hinge.

92. (New) The stent of Claim 85, wherein the taper is substantially constant along a length of about 2/3 of a length of the hinge.

93. (New) The stent of Claim 85, wherein the taper extends along a length of about 2/3 of a length of the hinge.

94. (New) The stent of Claim 85, comprising a pawl disposed adjacent to the hinge and a plurality of teeth adapted to receive the pawl in a locking configuration.

95. (New) The stent of Claim 94, wherein during expansion, the pawl experiences at least two degrees of freedom of motion.

96. (New) The stent of Claim 85, wherein the device is laser-cut.

97. (New) The stent of Claim 85, wherein the elongated beams further include a plurality of apertures disposed therein and a beneficial agent disposed within the apertures.

98. (New) The stent of Claim 85, wherein a recoil of the medical device after expansion to the second diameter is less than about eight percent.

99. (New) The stent of Claim 85, wherein a recoil of the medical device after expansion to the second diameter is less than about five percent.

100. (New) The stent of Claim 85, wherein the device is manufactured of a biodegradable material.

101. (New) The stent of Claim 85, wherein the device is manufactured of Nitinol, polymer, or a composite of polymer and Nitinol.

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 48-53, 55, 64-74 and 85-101 are currently pending.

Telephone Interview

Applicant would like to thank Examiner Thaler for his time and helpful suggestions provided in the Telephone interview with Applicant's attorney, Cindy Lynch, conducted on March 9, 2004. During the telephone interview, Applicant described the advantages of the tapered hinge and the